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APPLICATION NO.	F	LING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.	
10/684,191	10/14/2003		Long Bao Zhang	USDP2274A-ALL	8860	
30265	7590	11/08/2006		EXAMINER		
RAYMOND Y. CHAN				HAN, JASON		
108 N. YNE MONTERE	•			ART UNIT PAPER NUMBE		
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Please find below and/or attached an Office communication concerning this application or proceeding.

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		A	pplication No.	Applicant(s)	Applicant(s)				
Office Action Summary			0/684,191	ZHANG, LONG	ZHANG, LONG BAO				
			xaminer	Art Unit					
			ason M. Han	2875					
Period fo	The MAILING DATE of this commun or Reply	ication appear	rs on the cover sheet	with the correspondence	address				
WHIC - Exte after - If NC - Failu Any	ORTENED STATUTORY PERIOD F CHEVER IS LONGER, FROM THE N nsions of time may be available under the provisions SIX (6) MONTHS from the mailing date of this comn o period for reply is specified above, the maximum st ure to reply within the set or extended period for reply reply received by the Office later than three months a ed patent term adjustment. See 37 CFR 1.704(b).	IAILING DATE of 37 CFR 1.136(a nunication. atutory period will a will, by statute, cau	OF THIS COMMUI  In no event, however, may  pply and will expire SIX (6) N  se the application to become	NICATION. The reply be timely filed  SONTHS from the mailing date of this parameter (35 U.S.C. § 133).					
Status									
1)	Responsive to communication(s) file	ed on <i>21 Aug</i> u	ıst 2006						
2a)⊠	•								
3)									
-,	closed in accordance with the practice under <i>Ex parte Quayle</i> , 1935 C.D. 11, 453 O.G. 213.								
Disposit	ion of Claims	·	•						
4)⊠	Claim(s) 3-15 is/are pending in the a	application.		•					
,,,	4a) Of the above claim(s) is/are withdrawn from consideration.								
5)	Claim(s) is/are allowed.								
· · ·	Claim(s) 3-15 is/are rejected.								
7)	Claim(s) is/are objected to.								
8)[	Claim(s) are subject to restrict	ction and/or el	ection requirement.	(					
Applicat	ion Papers								
9)□	The specification is objected to by th	e Examiner.		•					
, —	The drawing(s) filed on 14 October 2		)⊠ accepted or b)□	objected to by the Exam	niner.				
,—	Applicant may not request that any obje	ction to the dra	wing(s) be held in abey	/ance. See 37 CFR 1.85(a)	•				
	Replacement drawing sheet(s) including	the correction	is required if the drawi	ng(s) is objected to. See 37	CFR 1.121(d).				
11)	The oath or declaration is objected to	o by the Exam	niner. Note the attach	ned Office Action or form	PTO-152.				
Priority (	under 35 U.S.C. § 119								
•	Acknowledgment is made of a claim  ☐ All b) ☐ Some * c) ☐ None of:	for foreign pri	ority under 35 U.S.C	. § 119(a)-(d) or (f).					
·	1. Certified copies of the priority	documents h	ave been received.						
•	2. Certified copies of the priority	documents h	ave been received ir	Application No					
	3. Copies of the certified copies	of the priority	documents have be	en received in this Nation	ial Stage				
	application from the Internation	onal Bureau (F	PCT Rule 17.2(a)).						
* (	See the attached detailed Office action	on for a list of t	the certified copies n	ot received.					
Attachmer			A) [] 1-1	w Summany (BTO 442)					
	ce of References Cited (PTO-892) ce of Draftsperson's Patent Drawing Review (F	PTO-948)	Paper N	w Summary (PTO-413) lo(s)/Mail Date					
3) 🔲 Infor	mation Disclosure Statement(s) (PTO/SB/08)	•	~~~~	of Informal Patent Application					
Раре	er No(s)/Mail Date		6) LJ Other: _						

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## **DETAILED ACTION**

## Response to Arguments

- 1. Applicant's arguments filed August 21, 2006 have been fully considered but they are not persuasive.
- 2. In response to Applicant's arguments, it should be noted that the prior art to Begemann (U.S. Patent 6,220,722 B1) remains commensurate to the scope of the claims as stated by the Applicant within the context of the claim language and as broadly interpreted by the Examiner [MPEP 2111], which is elucidated and recapitulated in the rejection below. At present, the Applicant has not provided sufficient limiting structure within the claim language to render patentability over the prior art.
- 3. In response to Applicant's argument found in 4(a)-4(b), the Applicant is again reminded that the structural limitations found in the claim language does not specify as to the exact structure of the elongated supporting frame, whereby the Examiner maintains a broad interpretation such that the prior art to Begemann clearly teaches a supporting frame having a dissipating end [Figures 1-2: (1)] and a peripheral surface [Figures 1-2: (3)] at an outer surrounding surface [Figures 1-2: (5)], said supporting frame being of good heat conduction material [Column 3, Lines 56-58, 66-67].
- 4. In response to Applicant's argument found in 4(c), the Examiner's interpretation was one where the luminary element [Figures 3A-3D or Figures 1-2: (4)] was defined as the whole LED package incorporating the various components identified in the claim language. Said luminary element (or whole LED package) was then interpreted and taught by Begemann to be mounted on the peripheral surface [Figures 1-2: (3)] of the

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supporting frame. Regardless, it is also clear to the Examiner that the "light point 11" of Begemann is mounted on the substrate 3 (or peripheral surface).

- 5. In response to Applicant's argument found in 4(d), Begemann clearly teaches the supporting frame [Figures 1-2: (1, 3)] being adapted for transmitting and dissipating heat from the luminary element at the dissipating end of the supporting frame [Column 3, Lines 56-58].
- 6. Applicant's arguments found in 6-12 are not persuasive under the grounds of rejection identified and expounded upon below. To reiterate, the Applicant is advised that the prior art to Begemann (U.S. Patent 6,220,722 B1) remains commensurate to the scope of the claims as stated by the Applicant within the context of the claim language and as broadly interpreted by the Examiner [MPEP 2111], which is elucidated and recapitulated in the rejection below. At present, the Applicant has not provided sufficient limiting structure within the claim language to render patentability over the prior art.

#### Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

- (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.
- 7. Claims 3-15 are rejected under 35 U.S.C. 102(b) as being anticipated by Begemann (U.S. Patent 6220722).

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8. With regards to Claim 3, Begemann discloses a light source arrangement including:

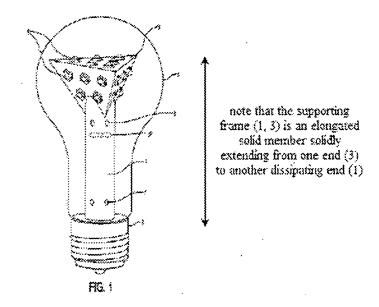
- An electric input adapter [Figures 1-2: (2)] for electrically connecting with a power source;
- A light head including:
  - A supporting frame [Figures 1-2: (1, 3)], which is made of good heat conduction material [Column 3, Lines 56-58, 66-67], with at least a dissipating end [Figures 1-2: (1)] and a peripheral surface [Figures 1-2: (3)] at an outer surrounding surface; and
- A luminary unit [Figures 1-2: (4); Figures 3A-3D] including:
  - A circuit [MC-PCB: Column 4, Lines 53-65] provided on said peripheral surface of said supporting frame and electrically connected with said electric input adapter, and
  - At least a luminary element [Figure 3] mounted on the peripheral surface of the supporting frame, wherein when the luminary element emits the light in a radial direction with respect to the supporting frame, the supporting frame is adapted for transmitting and dissipating heat from the luminary element at the dissipating end of the supporting frame [Column 3, Line 66 Column 4, Line 6].
- 9. With regards to Claim 4, Begemann discloses the circuit including a guiding window [Figure 3D: (15)], wherein when the circuit is provided on the peripheral surface

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of the supporting frame, the luminary element is mounted at the peripheral surface of the supporting frame within the guiding window to electrically couple with the circuit.

- 10. With regard to Claims 5-6, Begemann discloses the luminary element having two terminal electrodes [Figure 3: (14)] electrically coupling with the peripheral surface of the supporting frame and electrically connecting to the circuit respectively.
- 11. With regard to Claims 7-9, Begemann discloses the supporting frame [Figures 1-2: (1, 3)] being an elongated solid member solidly extending from one end to another dissipating end [note drawing below].



- 12. With regard to Claims 10-12, Begemann discloses the supporting frame [Figures 1-2: (1, 3)] being a hollow member having a circular cross section [Figure 1: (1)].
- 13. With regard to Claims 13-15, Begemann discloses the supporting frame [Figures 1-2: (1, 3)] being a hollow member having a polygonal cross section [Figures 1-2: (3)].

### Conclusion

THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jason M. Han whose telephone number is (571) 272-2207. The examiner can normally be reached on 8:00am-5:00pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Sandra O'Shea can be reached on (571) 272-2378. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Jason M Han Examiner Art Unit 2875

JMH (11/3/2006)

Sandra O'Shea
Supervisory Patent Examiner
Technology Center 2800

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